

Remote Sensing of Environment

An Interdisciplinary Journal

VOLUME 56, NUMBER 1, APRIL 1996

Contents

Mats Nilsson

- Estimation of Tree Heights and Stand Volume Using an Airborne Lidar System** 1

Mary Pax Lenney, Curtis E. Woodcock, John B. Collins, and Hassan Hamdi

- The Status of Agricultural Lands in Egypt: The Use of Multitemporal NDVI Features Derived from Landsat TM** 8

Derek M. Burrage, Craig R. Steinberg, William J. Skirving, Joan A. Kleypas

- Mesoscale Circulation Features of the Great Barrier Reef Region Inferred from NOAA Satellite Imagery** 21

J. G. P. W. Clevers and H. J. C. van Leeuwen

- Combined Use of Optical and Microwave Remote Sensing Data for Crop Growth Monitoring** 42

O. Taconet, D. Vidal-Madjar, Ch. Emblanch, and M. Normand

- Taking into Account Vegetation Effects to Estimate Soil Moisture from C-Band Radar Measurements** 52

Michael Roderick, Richard Smith, and Shane Cridland

- The Precision of the NDVI Derived from AVHRR Observations** 57

John B. Collins and Curtis E. Woodcock

- An Assessment of Several Linear Change Detection Techniques for Mapping Forest Mortality Using Multitemporal Landsat TM Data** 66

Remote Sensing of Environment

An Interdisciplinary Journal

VOLUME 56, NUMBER 2, MAY 1996

Contents

B. Ruth

- Characterization of the Photosynthetic System by Measuring the Laser-Induced Chlorophyll Fluorescence in the msec Range from Medium Distances** 79

G. Pandithurai, P. C. S. Devara, P. Ernest Raj, and S. Sharma

- Aerosol Size Distribution and Refractive Index from Bistatic Lidar Angular Scattering Measurements in the Surface Layer** 87

Clive B. Rapier and Kelvin J. Michael

- The Calibration of a Small, Low-Cost Thermal Infrared Radiometer** 97

Th. Fourty, F. Baret, S. Jacquemoud, G. Schmuck, and J. Verdebout

- Leaf Optical Properties with Explicit Description of Its Biochemical Composition: Direct and Inverse Problems** 104

Mark E. Jakubauskas

- Thematic Mapper Characterization of Lodgepole Pine Seral Stages in Yellowstone National Park, USA** 118

D. S. Kimes, B. N. Holben, J. E. Nickeson, and W. A. McKee

- Extracting Forest Age in a Pacific Northwest Forest from Thematic Mapper and Topographic Data** 133

Short Communication

R. M. Mitchell

- Preflight Calibration Anomaly in the NOAA 14 AVHRR Channels 1 and 2** 141

Remote Sensing of Environment

An Interdisciplinary Journal

VOLUME 56, NUMBER 3, JUNE 1996

Contents

Josef Cihlar

- Identification of Contaminated Pixels in AVHRR Composite Images for Studies of Land Biosphere** 149

Ph. Malet

- Classifying the Geometry of Canopies from Time Variations of Red and Near-Infrared Reflectance** 164

Simon J. Hook and Anne B. Kahle

- The Micro Fourier Transform Interferometer (μ FTIR)—A New Field Spectrometer for Acquisition of Infrared Data of Natural Surfaces** 172

Y. L. Grossman, S. L. Ustin, S. Jacquemoud, E. W. Sanderson, G. Schmuck, and J. Verdebout

- Critique of Stepwise Multiple Linear Regression for the Extraction of Leaf Biochemistry Information from Leaf Reflectance Data** 182

S. Jacquemoud, S. L. Ustin, J. Verdebout, G. Schmuck, G. Andreoli, and B. Hosgood

- Estimating Leaf Biochemistry Using the PROSPECT Leaf Optical Properties Model** 194

Stephen J. Hurcom, Andrew R. Harrison, and Malcolm Taberner

- Assessment of Biophysical Vegetation Properties through Spectral Decomposition Techniques** 203

Volume Contents